

| | | | | | |
|---|-----|-----|-----|-----|-----|
| 387 | 396 | 405 | 414 | 423 | 432 |
| AAT GGT ATC AGA ACT GGA TTT TTG AAA ATT GAT GAA TAC ATG CGT AAC TTT TCA | | | | | |
| N G I R T G F L K I D E Y M R N F S | | | | | |
| 441 | 450 | 459 | 468 | 477 | 486 |
| GAC CTC AGA AAC GGG ATG GAC AGG AGT GGT TCA ACT GCA GTG GGA GTT ATG ATT | | | | | |
| D L R N G M D R S G S T A V G V M I | | | | | |
| 495 | 504 | 513 | 522 | 531 | 540 |
| TCA CCT AAG CAT ATC TAC TTT ATC AAC TGT GGT GAT TCA CGT GCT GTT CTG TAT | | | | | |
| S P K H I Y F I N C G D S R A V L Y | | | | | |
| 549 | 558 | 567 | 576 | 585 | 594 |
| AGG AAT GGA CAA GTC TGC TTT TCT ACC CAG GAT CAC AAA CCT TGC AAT CCA AGG | | | | | |
| R N G Q V C F S T Q D H K P C N P R | | | | | |
| 603 | 612 | 621 | 630 | 639 | 648 |
| GAA AAG GAG CGA ATC CAA AAT GCA GGA GGC AGC GTG ATG ATA CAA CGT GTT AAT | | | | | |
| E K E R I Q N A G G S V M I Q R V N | | | | | |
| 657 | 666 | 675 | 684 | 693 | 702 |
| GGT TCA TTA GCA GTA TCT CGT GCT GGT GGG GAC TAT GAT TAC AAG TGT GTT GAT | | | | | |
| G S L A V S R A L G D Y D Y K C V D | | | | | |
| 711 | 720 | 729 | 738 | 747 | 756 |
| GGC AAG GGC CCA ACA GAA CAA CTT GTT TCT CCA GAG CCT GAG GTT TAT GAA ATT | | | | | |
| G K G P T E Q L V S P E P E V Y E I | | | | | |

FIGURE 1B

| | | | | | |
|---|------|------|------|------|------|
| 765 | 774 | 783 | 792 | 801 | 810 |
| TTA AGA GCA GAA GAG GAT GAA TTT ATC ATC TTG GCT TGT GAT GGG ATC TGG GAT | | | | | |
| L R A E E D E F I I L A C D G I W D | | | | | |
| 819 | 828 | 837 | 846 | 855 | 864 |
| GTT ATG AGT AAT GAG GAG CTC TGT GAA TAT GTT AAA TCT AGG CTT GAG GTA TCT | | | | | |
| V M S N E E E L C E Y V K S R L E V S | | | | | |
| 873 | 882 | 891 | 900 | 909 | 918 |
| GAT GAC CTG GAA AAT GTG TGC AAT TGG GTA GTG GAC ACT TGT TTA CAC AAG GGA | | | | | |
| D D L E N V C N W V V D T C L H K G | | | | | |
| 927 | 936 | 945 | 954 | 963 | 972 |
| AGT CGA GAT AAC ATG AGT ATT GTA CTA GTT TGC TTT TCA AAT GCT CCC AAG GTC | | | | | |
| S R D N M S I V L V C F S N A P K V | | | | | |
| 981 | 990 | 999 | 1008 | 1017 | 1026 |
| TCA GAT GAA GCG GTG AAA AAA GAT TCA GAG TTG GAT AAG CAC TTG GAA TCA CGG | | | | | |
| S D E A V K K D S E L D K H L E S R | | | | | |
| 1035 | 1044 | 1053 | 1062 | 1071 | 1080 |
| GTT GAA GAG ATT ATG GAG AAG TCT GGC GAG GAA GGA ATG CCT GAT CTT GCC CAT | | | | | |
| V E E I M E E K S G E E G M P D L A H | | | | | |
| 1089 | 1098 | 1107 | 1116 | 1125 | 1134 |
| GTC ATG CGC ATC TTG TCT GCA GAA AAT ATC CCA AAT TTG CCT CCT GGG GGA GGT | | | | | |
| V M R I L S A E N I P N L P P G G G | | | | | |

FIGURE 1C

1143 1152 1161 1170 1179 1188
CTT GCT GGC AAG CGT AAT GTT ATT GAA GCT GTT TAT AGT AGA CTG AAT CCA CAT
L A G K R N V I E A V Y S R L N P H

1197 1206 1215 1224 1233 1242
AGA GAA AGT GAT GGG GCC TCC GAT GAA GCA GAG GAA AGT GGA TCA CAG GGA AAA
R E S D G A S D E A E E S G S Q G K

1251 1260 1269 1278 1287 1296
TTG GTG GAA GCT CTC AGG CAA ATG AGA ATT AAT CAT AGG GGA AAC TAC CGA CAA
L V E A L R Q M R I N H R G N Y R Q

1305 1314 1323 1332 1341 1350
CTT CTG GAG GAG ATG CTG ACT AGT TAC AGG CTA GCT AAA GTA GAG GGA GAA GAA
L L E E M L T S Y R L A K V E G E E

1359 1368 1377 1386 1395 1404
AGC CCT GCT GAA CCA GCT GCC ACA GCT ACT TCT TCG AAC AGT GAT GCT GGA AAC
S P A E P A A T A T S S N S D A G N

1413 1422 1431 1440 1449 1458
CCA GTG ACA ATG CAG GAA AGC CAT ACT GAA TCA GAA AGT GGT CTT GCT GAA TTA
P V T M Q E S H T E S E S G L A E L

1467 1476 1485 1494 1503 1512
GAC AGC TCT AAT GAA GAT GCA GGG ACA AAG ATG AGT GGT GAA AAA ATA TGA CTT
D S S N E D A G T K M S S G E K I

FIGURE 1D

| | | | | | |
|---|------|------|------|------|------|
| 1521 | 1530 | 1539 | 1548 | 1557 | 1566 |
| TCC TTT TTG GTA ATA TTT TTG TGA TCT TTG ATG GTT TTT AAC CTA GGA AGT GTA | | | | | |
| 1575 | 1584 | 1593 | 1602 | 1611 | 1620 |
| ATG TAT GCA TTT ATA TAA CTG TTT TGT TAT TTG AAT CTT GGA AAA CTA GTT TTA | | | | | |
| 1629 | 1638 | 1647 | 1656 | 1665 | 1674 |
| TTA TAT TCA GAT AGC CTT GTT TTT TAA AAA GGC CTT TGC ATA CAC CTT TAT GAG | | | | | |
| 1683 | 1692 | 1701 | 1710 | 1719 | 1728 |
| ATA GTG TAA AAT TGA CTA TTT ATA GTA CTA TGG ATT TAA TGA AAT TAT ATG TCA | | | | | |
| 1737 | 1746 | 1755 | 1764 | 1773 | 1782 |
| TTT CAC ATT GTA TGC CAG AAA TTA GGC TAC CAA TTA TGA ATT AAA GTC AGT AGT | | | | | |
| 1791 | 1800 | 1809 | 1818 | 1827 | 1836 |
| TAA ATT AAT ACT AGA TAG AAT TAG AAA TTT TGA TTA GAG AGA TTA TGC TAT ATT | | | | | |
| 1845 | 1854 | 1863 | 1872 | 1881 | 1890 |
| ATG GAA AAA CTT GTT AAT GTA GAA TTA TAC TGC TTC ATA TTA TTT TAC CTA TTA | | | | | |

FIGURE 1E

| | | | | | |
|---|------|------|------|------|------|
| 1899 | 1908 | 1917 | 1926 | 1935 | 1944 |
| GTA CAC TCA TAG TTA GCT TTG TAA TAA ATT TAT GTT TTC TTT AAT AAT TTT AGT | | | | | |
| 1953 | 1962 | 1971 | 1980 | 1989 | 1998 |
| TCT TCA AAG AAT GGC TGA TGC TGG CCT GTA ATT TTT CTT TCA AGG ATG ATA ATT | | | | | |
| 2007 | 2016 | 2025 | 2034 | 2043 | 2052 |
| TGT GTG TTG TTT GAT TTG TTT ATA TTT TAC ATC TCT GTA GTT TTA TTT TTA GAA | | | | | |
| 2061 | 2070 | 2079 | 2088 | 2097 | 2106 |
| GTT GTG AGA TAT TGG ATG TGT GGC TAT TTT TCC TTT CTC TGT ATT CTT TAT GAA | | | | | |
| 2115 | 2124 | 2133 | 2142 | 2151 | 2160 |
| ACA TAA CTT TTG AAA AAC CTA TGT ATT ATT CAT ACA GCT TTG GTT TGT ATA TTC | | | | | |
| 2169 | 2178 | 2187 | 2196 | 2205 | 2214 |
| TGT ATA GCC TAA CTA CAC ACA TCA AAA TGT ATG TCA ACC AAG TGT TTA GAA TGA | | | | | |
| 2223 | 2232 | 2241 | 2250 | 2259 | 2268 |
| AAT TAT AAG TGT TTA AGT CCA AAT AAA GCA TGT GAT GTG GAA TAA TCA AAA AAA | | | | | |

FIGURE 1F

Docket No : PF-0319-2 DIV
Inventors: Bandman et al.
Title: HUMAN PROTEIN PHOSPHATASE
Serial No : To Be Assigned

1007230 DE 2001

AA 3'

FIGURE 1G

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|
| 1 | M | G | A | F | L | D | K | P | K | T | E | K | H | N | A | H | G | A | G | N | G | L | R | Y | G | L | S | S | M | Q | G | W | R | V | E | M | E | D | A | H | 13177 |
| 1 | M | G | A | F | L | D | K | P | K | T | E | K | H | N | A | H | G | A | G | N | G | L | R | Y | G | L | S | S | M | Q | G | W | R | V | E | M | E | D | A | H | GI 247927 |
| 1 | M | G | A | F | L | D | K | P | K | T | E | K | H | N | A | H | G | A | G | N | G | L | R | Y | G | L | S | S | M | Q | G | W | R | V | E | M | E | D | A | H | GI 452526 |
| 41 | T | A | V | V | G | I | P | H | G | L | E | D | W | S | F | F | A | V | Y | D | G | H | A | G | S | R | V | A | N | Y | C | S | T | H | L | L | E | H | I | T | 13177 |
| 41 | T | A | V | V | G | I | P | H | G | L | E | D | W | S | F | F | A | V | Y | D | G | H | A | G | S | R | V | A | N | Y | C | S | T | H | L | L | E | H | I | T | GI 247927 |
| 41 | T | A | V | V | G | I | P | H | G | L | D | N | W | S | F | F | A | V | Y | D | G | H | A | G | S | R | V | A | N | Y | C | S | T | H | L | L | E | H | I | T | GI 452526 |
| 81 | T | N | E | D | F | R | A | A | G | K | S | G | S | A | L | E | L | S | V | E | N | V | K | N | G | I | R | T | G | F | L | K | I | D | E | Y | M | R | N | F | 13177 |
| 81 | T | N | E | D | F | R | A | A | D | K | S | G | S | A | L | E | P | S | V | E | N | V | K | T | G | I | R | T | G | F | L | K | I | D | E | Y | M | R | N | F | GI 247927 |
| 81 | T | N | E | D | F | R | A | A | D | K | S | G | S | A | L | E | P | S | V | E | S | V | K | T | G | I | R | T | G | F | L | K | I | D | E | Y | M | R | N | F | GI 452526 |
| 121 | S | D | L | R | N | G | M | D | R | S | G | S | T | A | V | G | V | M | I | S | P | K | H | I | Y | F | I | N | C | G | D | S | R | A | V | L | Y | R | N | G | 13177 |
| 121 | S | D | L | R | N | G | M | D | R | S | G | S | T | A | V | G | V | M | I | S | P | T | H | I | Y | F | I | N | C | G | D | S | R | A | V | L | C | R | N | G | GI 247927 |
| 121 | S | D | L | R | N | G | M | D | R | S | G | S | T | A | V | G | V | M | V | S | P | T | H | M | Y | F | I | N | C | G | D | S | R | A | V | L | C | R | N | G | GI 452526 |
| 161 | Q | V | C | F | S | T | Q | D | H | K | P | C | N | P | R | E | K | E | R | I | Q | N | A | G | G | S | V | M | I | Q | R | V | N | G | S | L | A | V | S | R | 13177 |
| 161 | Q | V | C | F | S | T | Q | D | H | K | P | C | N | P | M | E | K | E | R | I | Q | N | A | G | G | S | V | M | I | Q | R | V | N | G | S | L | A | V | S | R | GI 247927 |
| 161 | Q | V | C | F | S | T | Q | D | H | K | P | C | N | P | V | E | K | E | R | I | Q | N | A | G | G | S | V | M | I | Q | R | V | N | G | S | L | A | V | S | R | GI 452526 |
| 201 | A | L | G | D | Y | D | Y | K | C | V | D | G | K | G | P | T | E | Q | L | V | S | P | E | P | E | V | Y | E | I | L | R | A | E | E | D | E | F | I | I | L | 13177 |
| 201 | A | L | G | D | Y | D | Y | K | C | V | D | G | K | G | P | T | E | Q | L | V | S | P | E | P | E | V | Y | E | I | L | R | A | E | E | D | E | F | V | V | L | GI 247927 |
| 201 | A | L | G | D | Y | D | Y | K | C | V | D | G | K | G | P | T | E | Q | L | V | S | P | E | P | E | V | Y | E | I | V | R | A | E | E | D | E | F | V | V | L | GI 452526 |

FIGURE 2A

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|-----------|-----------|-----------|
| 241 | A | C | D | G | I | W | D | V | M | S | N | E | E | L | C | E | Y | V | K | S | R | L | E | V | S | D | D | L | E | N | V | C | N | W | V | V | D | T | C | L | 13177 |
| 241 | A | C | D | G | I | W | D | V | M | S | N | E | E | L | C | E | F | V | N | S | R | L | E | V | S | D | D | L | E | N | V | C | N | W | V | V | D | T | C | L | GI 247927 |
| 241 | A | C | D | G | I | W | D | V | M | S | N | E | E | L | C | E | F | V | K | S | R | L | E | V | S | D | D | L | E | N | V | C | N | W | V | V | D | T | C | L | GI 452526 |
| 281 | H | K | G | S | R | D | N | M | S | I | V | L | V | C | F | S | N | A | P | K | V | S | D | E | A | V | K | K | D | S | E | L | D | K | H | L | E | S | R | V | 13177 |
| 281 | H | K | G | S | R | D | N | M | S | I | V | L | V | C | F | A | N | A | P | K | V | S | D | E | A | V | K | R | D | L | E | L | D | K | H | L | E | S | R | V | GI 247927 |
| 281 | H | K | G | S | R | D | N | M | S | V | V | L | V | C | F | S | N | A | P | K | V | S | E | E | A | V | K | R | D | S | E | L | D | K | H | L | E | S | R | V | GI 452526 |
| 321 | E | E | I | M | E | K | S | G | E | E | G | M | P | D | L | A | H | V | M | R | I | L | S | A | E | N | I | P | N | L | P | P | G | G | L | A | G | K | R | 13177 | |
| 321 | E | E | I | M | Q | K | S | G | E | E | G | M | P | D | L | A | H | V | M | R | I | L | S | A | E | N | I | P | N | L | P | P | G | G | L | A | G | K | R | GI 247927 | |
| 321 | E | E | I | M | Q | K | S | G | E | E | G | M | P | D | L | A | H | V | M | R | I | L | S | A | E | N | I | P | N | L | P | P | G | G | L | A | G | K | R | GI 452526 | |
| 361 | N | V | I | E | A | V | Y | S | R | L | N | P | H | R | E | S | D | G | A | S | D | E | A | E | E | S | G | S | Q | G | K | L | V | E | A | L | R | Q | M | R | 13177 |
| 361 | N | V | I | E | A | V | Y | S | R | L | N | P | N | K | D | N | D | G | G | A | G | D | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | GI 247927 | |
| 361 | H | V | I | E | A | V | Y | S | R | L | N | P | H | K | D | N | D | G | G | A | G | D | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | GI 452526 | |
| 401 | I | N | H | R | G | N | Y | R | Q | L | L | E | E | M | L | T | S | Y | R | L | A | K | V | E | G | E | E | S | P | A | E | P | A | A | T | A | T | S | S | N | 13177 |
| 383 | - | - | - | - | - | - | - | - | - | - | L | E | D | S | L | V | A | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | GI 247927 | |
| 383 | - | - | - | - | - | - | - | - | - | - | L | E | D | S | L | V | A | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | GI 452526 | |
| 441 | S | D | A | G | N | P | V | T | M | Q | E | S | H | T | E | S | E | S | G | L | A | E | L | D | S | S | N | E | D | A | G | T | K | M | S | G | E | K | I | 13177 | |
| 390 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | GI 247927 | | |
| 390 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | GI 452526 | | |

FIGURE 2B

Docket No.: PF-0319-2 DIV
Inventors: Bandman et al.
Title: HUMAN PROTEIN PHOSPHATASE
Serial No.: To Be Assigned

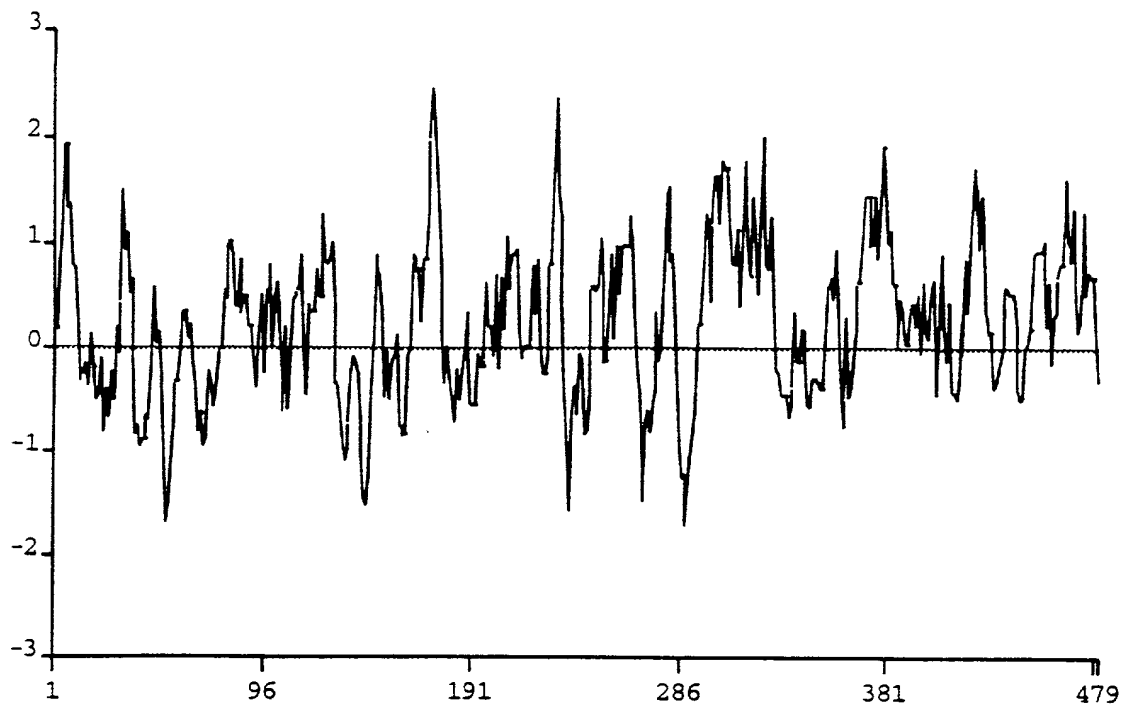


FIGURE 3A

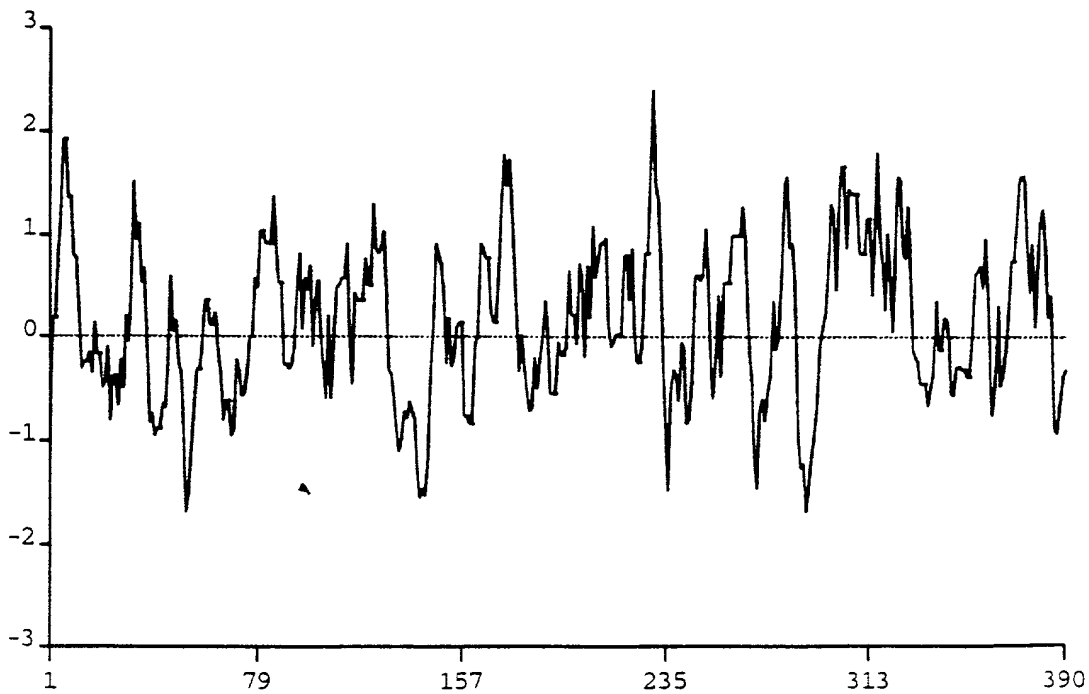


FIGURE 3B

205020 DET 2/00T